

REMARKS

This is in full and timely response to the above-identified Office Action. The above listing of the claims supersedes any previous listing. Favorable reexamination and reconsideration is respectfully requested in view of the preceding amendments and the following remarks.

Claim Amendments

In this response, claims 1 and 17 have been amended. Claim 17 has been rewritten to assume independent form, while claim 1 has been amended in a manner which is deemed to clarify the claimed subject matter over the art which is applied in this Office Action. More specifically, claim 1 has been limited to a crash barrier in which the coupling structure between two adjacent structural elements is associated with the energy-absorbing material, whereby upon impact, the movement between the adjacent elements about the coupling structure is controlled by the energy absorbing material. To further clarify the situation, claim 1 was limited to recite that the energy-absorbing material is different than the material of which the structural elements are made. This overcomes the position taken in this Office Action that “Mandish teaches a barrier arrangement including energy absorbing material”, and the statement on page 3, line 5, that Mandish “teaches rubber as a material of construction”.

Rejections under 35 USC § 103

- 1) The rejection of claims 1-3, 5, 13, 15 and 16 under 35 USC § 103(a) as being unpatentable over Mandish et al. in view of Prosenz is respectfully traversed.

This rejection ignores the teachings of Mandish et al. in order to apply those of Prosenz so as to arrive at the claimed subject matter. Column 3, line 33-68 of Mandish et al. discloses:

Referring to the drawings and especially to FIGS. 1 and 2, anti-crash type road barrier 10 is an energy absorbing roadway barrier for dissipating kinetic energy upon impact by a moving vehicle tire and includes a central core of high density concrete having a plurality of **prestressed reinforcing steel rebar members 12 passing therethrough**. The roadway barrier 10 is mounted to a roadway 13 with barrier anchors 14 bolted with anchor members

15 to the roadway 13. The roadway anchor portion 14 can be seen connected with steel extensions 16 to a generally U-shaped support channel member 17 which in turn is attached to the core member 11 with fasteners or bolts 18. In addition, the support and anchor members has a cross-brace member portion 20 and a cover portion 21 formed over the anchoring base 14. The entire road barrier 10 core 11 has a lightweight concrete material 22 formed thereover and designed to be an energy absorbing and sound absorbing lightweight concrete for dissipating kinetic energy upon impact with a moving vehicle or the like. The roadway barrier 10 is shaped to have a flat bottom portion with a vertical rise portion 23 and a pair of arcuate portions 24 on either side thereof capped with a narrow flat ridge 25 having a plurality of openings 19 therein for placing inserts for lifting the barrier. A raised portion 29 forms a passageway for water to pass beneath the barrier. **The end of each barrier member 10 has a keyway 26 extending vertically while a half-circle access reveal 27 matches the half-circle on adjacent or abutting barrier member to provide an access from the side at the adjoining joint between two members while the interlock keyway 26 can provide access from the top. A central rebar member 28 from the high density concrete core 11 can protrude from the end for attaching to the next abutting barrier member 10. The central rebar member 28 does not have to be prestressed.** (Emphasis added)

The rejection ignores these teachings and proceeds immediately to transfer teachings pertaining to the Prosenz structure to that of Mandish et al. without giving any consideration as to what has to be ignored in Mandish et al. in order to permit the same. Indeed, it would appear that if the reader (viz., the hypothetical person of ordinary skill) were to consider the disclosure of the two arrangements and deem the hinged connection arrangement disclosed in Prosenz to be of merit, the disclosure of Prosenz would be used without consideration of the arrangement

disclosed in Mandish et al. wherein a non-hinging, end-to-end abutting connection is clearly suggested. Basically, the question is how, without a working knowledge of what is claimed could the hypothetical person of ordinary skill be motivated to change the connection found in Mandish et al. to that found in Prosenz? The rejection simply glosses over this major stumbling block and is in effect based on what is not disclosed rather than what is.

The position that Mandish et al. discloses rubber as a material for construction is an over-simplification. What is disclosed is concrete containing pieces of chopped up vulcanized rubber. See the abstract wherein it is disclosed that:

The lightweight concrete may be pieces of chopped up vulcanized rubber, such as chopped up used tires which have been prepared and **coated and mixed with a cement mixture**, alternatively lightweight polymer such as polystyrene, which may be chopped up used polystyrene being recycled can be incorporated into the barrier portion. (Emphasis added)

Regarding the specific mention of claims 15 and 16, the limitations of these claims being "met" may be suitable for a rejection under § 102. However, this rejection is made under § 103 and the reasons why the hypothetical person of ordinary skill would be motivated to note these features must be advanced - not just a shopping list of elements which has been developed with a full working knowledge of the claims under examination.

- 2) The rejection of claims 1-3, 5, 13 and 15 under 35 US § 103(a) as being unpatentable over Prosenz in view of Mandish et al. is traversed.

In this rejection, it is advanced that Mandish et al. discloses an energy absorbing material which is included in the barrier arrangement. This presumably is the chopped up rubber or plastic that is used as a filler in the concrete. While there is disclosure of the concrete being light weight, it is presumption on behalf of the examiner that this concrete is still energy absorbing in nature. The question is while rubber is an energy absorbing material in its own right, once it becomes part of the concrete would the hypothetical person of ordinary skill consider to suggest this characteristic. Indeed, without the claims to guide the reader, why would the filler in the concrete be vaguely be considered as an energy absorbing material.

If the rejection were to be made under § 102 then the position would be a little more tenable - the examiner is permitted to read the claims on the disclosed arrangements irrespective of what is suggested by the disclosure. However, once the rejection is made under § 103 the situation changes dramatically it is what hypothetical person of ordinary skill would understand the references to disclose that is key. As the examiner knows the hypothetical person of ordinary skill is neither permitted under the § 103 statute to have a working knowledge of the claimed subject matter nor use it as a guide. The rejection clearly confuses the statutes and is therefore untenable for at least this reason.

Further, the disclosed features of Mandish et al. are not fully taken into consideration. For example, how does the hypothetical person of ordinary skill simply ignore the disclosure of the central rebar member 28 which is used to connected two of the barrier members together? Clearly, it would be understood by the hypothetical person of ordinary skill that the rebar 28 would have a pronounced effect on the articulation such as illustrated in Fig. 6 of Prosenz. The propriety of just ignoring this disclosure is challenged and it is requested that the examiner properly respond to this issue in a further office action. At this time it appears that the rebar 28 of Mandish et al. would render the arrangement of Prosenz at least partially inoperative for its intended purpose and some indication of how the rejection deals with this issue is demanded. The following two cases are deemed pertinent in this situation.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. ***In re Ratty***, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)." M.P.E.P. § 2143.02.

If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. ***In re Gordon***, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). M.P.E.P. § 2143.01.

- 3) The rejection of claim 6 under 35 USC § 103(a) as being unpatentable over Mandish et al., Prosenz and further in view of Smith, is respectfully traversed.

Smith is cited to show a bore which is acknowledged as being missing from the combination of Mandish et al. and Prosenz. This "bore" is taken out of context and the teachings of this reference are discarded with the assumption that the hypothetical person of ordinary skill is equipped with the claims. Column 3, line 15-29 of SMITH discloses:

As seen in FIG. 3, this means would include a substantially circular opening 30 bored within the body of the barrier. The body portion 32 of barrier 12 to a length so as to accommodate the full length of mounting rod 24 when mounting rod 24 would be inserted therein. The bore 30 would be lined with a cylinder 34, cylinder 34 having an inner diameter slightly larger than outer diameter of mounting rod 24, so as to slidingly accommodate mounting rod 24 within the opening 30 as illustrated in FIG. 4. Therefore, after mounting rods 24 have been secured in position via screw members 28, **a module member 12 could simply be slideably positioned onto rods 24** as illustrated in FIG. 1, with the barrier supported thereupon by the rod 24 extending into opening 30. (Emphasis added)

However, the light reflecting modules 12 are disclosed at column 3, lines 47-59, as follows:

As seen in FIG. 3, this means would include a substantially circular opening 30 bored within the body of the barrier. The body portion 32 of barrier 12 to a length so as to accommodate the full length of mounting rod 24 when mounting rod 24 would be inserted therein. The bore 30 would be lined with a cylinder 34, cylinder 34 having an inner diameter slightly larger than outer diameter of mounting rod 24, so as to slidingly accommodate mounting rod 24 within the opening 30 as illustrated in FIG. 4. Therefore, after mounting rods 24 have been secured in position via screw members 28, **a module member 12 could simply be slideably positioned onto rods 24** as illustrated in FIG. 1, with

the barrier supported thereupon by the rod 24 extending into opening 30. (Emphasis added)

The question then becomes "how are the modules discussed *supra* ignored for the sake of rejection?"

- 4) The rejection of claims 7 and 12 under 35 USC § 103(a) as being unpatenable over Mandish et al., Prosenz, Smith and further in view of Tagg is traversed.

The disclosure of Tagg does nothing to clarify the above dilemmas. Indeed, with almost total disregard of what else is disclosed by this reference, the fact that tubular pins are in some way mentioned is all that is relied upon for the sake of rejection.

Re Response to Arguments

The tenor of the comments is that - this is known and that is known. Good possibly for a § 102 rejection but not in the case the rejection is presented under § 103.

As to the assertion that the barriers are made of rubber, this is nonsense. The disclosure of Mandish et al. clearly discloses that the barriers are made of concrete. The use of rubber as a filler in the concrete does not convert this material from "concrete" into "rubber." It is did it would seem possible to use this concrete material to make car tires? After all, if it is rubber, as per the position taken by the examiner, and as used as a basis of rejection, it should be possible - shouldn't it?

The position that Prosenz is used "just" for teachings of general shape - is extremely detrimental to the rejections discussed *supra*. In the second rejection it is the primary reference and is relied upon for more than just its shape.

Allowable Subject Matter

The indication that claims 8, 9 and 17 contain allowable subject matter is noted with appreciation. As noted above, claim 17 has been rewritten to assume independent form and thus be in prima facie condition for allowance. Claims 8 and 9 are maintained in dependent form on the premise that the amendments to claim 1 will overcome the rejections leveled thereagainst.

Conclusion

It is respectfully submitted that the claims as they have been amended are allowable over the art which has been applied in this Office Action. Favorable reconsideration and allowance of this application are courteously solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,
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